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| APPLICATION NO.                 | FILING DATE                        | FIRST NAMED INVENTOR      | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|------------------------------------|---------------------------|---------------------|------------------|
| 10/554,182                      | 07/17/2006                         | Dugal Simon Stewart James | 653.0023USU         | 7819             |
| 27623<br>OHLANDT G              | 7590 03/05/200<br>REELEY, RUGGIERO |                           | EXAMINER            |                  |
| ONE LANDMARK SQUARE, 10TH FLOOR |                                    |                           | SIGLER, JAY R       |                  |
| STAMFORD,                       | CT 06901                           |                           | ART UNIT            | PAPER NUMBER     |
|                                 |                                    |                           | 3775                |                  |
|                                 |                                    |                           |                     |                  |
|                                 |                                    |                           | MAIL DATE           | DELIVERY MODE    |
|                                 |                                    |                           | 03/05/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/554,182 JAMES, DUGAL SIMON STEWART Office Action Summary

| Office Action Summary   | Examiner  | Art Unit |        |  |  |  |  |
|---|---|----------|--------|--|--|--|--|
|   | JAY R. SIGLER   | 3775     |        |  |  |  |  |
| The MAILING DATE of this communication app  |   |          | ldross |  |  |  |  |
| Period for Reply  |   |          |        |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be variable under the provisions of 37 CFR 1.136(a). In one worth however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  If NO period or reply is spiced above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply was the spiced above. The maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply with the set or extended period for reply within the set or extended period for reply was the set of the set |   |          |        |  |  |  |  |
| Status  |   |          |        |  |  |  |  |
| 1) Responsive to communication(s) filed on 12 No.   |   |          |        |  |  |  |  |
|   | ,—  |          |        |  |  |  |  |
| ·   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |          |        |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |          |        |  |  |  |  |
| Disposition of Claims   |   |          |        |  |  |  |  |
| 4) Claim(s) 5 and 15-24 is/are pending in the app   | lication.   |          |        |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |          |        |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |          |        |  |  |  |  |
| 6)⊠ Claim(s) <u>5 and 15-24</u> is/are rejected.  |   |          |        |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |          |        |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | r election requirement.   |          |        |  |  |  |  |
| Application Papers  |   |          |        |  |  |  |  |
| 9) The specification is objected to by the Examine  | r   |          |        |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |          |        |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |          |        |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |          |        |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |          |        |  |  |  |  |
|   |   |          |        |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |          |        |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |          |        |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |   |          |        |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |   |          |        |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |          |        |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |          |        |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |          |        |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |          |        |  |  |  |  |
|   |   |          |        |  |  |  |  |
|   |   |          |        |  |  |  |  |
| Attachment(s)   |   |          |        |  |  |  |  |
| Notice of References Cited (PTO-892)  | 4) Interview Summary  |          |        |  |  |  |  |
| Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)  | Paper No(s)/Mail Da<br>5) Notice of Informal P  |          |        |  |  |  |  |
| Paper No(s)/Mail Date   | 6) Other:   | **       |        |  |  |  |  |

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#### DETAILED ACTION

#### Priority

1. The disclosure of the prior-filed application 2003901971 in Australia, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. A screw thread being on the head of the shaft (see claims 20-22) is not supported in the disclosure of the prior-filed application. The second screw portion being integral with the shaft is not supported (see claim 5). Therefore, the date of the international application, 23 April 2004, will be used as the date of invention concerning claims 5 and 20-22.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being
  indefinite for failing to particularly point out and distinctly claim the subject matter which
  applicant regards as the invention.

The language "external screw thread of the first screw portion on said longitudinal shaft" renders the claims indefinite. The language "first screw portion" has been used for an element that is separate from the longitudinal shaft. The external screw thread of the first screw portion (e.g. 5 in the instant application) is on the first screw portion not on the longitudinal shaft. Further, the screw thread that is on the

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longitudinal shaft 11 is shown in the disclosure as corresponding with the internal screw thread of the second screw portion 6. It is unclear how the external screw thread of the first screw portion is on said longitudinal shaft.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 15-19, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,827,285 to Bramlet (hereinafter "Bramlet") in view of US 7,063,701 to Michelson (hereinafter "Michelson").
  - a. Concerning claims 15, 16, 17, and 19: Bramlet discloses a longitudinal shaft having a head and a longitudinal axis; a first screw portion rotatable about said longitudinal axis; a second screw portion rotatable about said longitudinal axis independently of said first screw portion, wherein said first and second screw portions each have an external screw thread configured to engage a bore formed in the first and second members (see Fig. 2 in Bramlet and modified Fig. 7 below).

Bramlet discloses retaining member 50 that mates with a surface/portion 38 in the first screw portion and is used to preclude rotation of the shaft relative to the first screw portion, but not specifically a retaining member being a screw or

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the first screw portion having an internal thread to mate with the retaining member.

Michelson, however, suggests a retaining screw 130 that mates with an internal thread 118 and is used to prevent backing out of a longitudinal shaft 100 and thus substantially prevents rotation of said shaft. It would have been obvious to someone of ordinary skill in the art at the time of the invention to substitute the retaining member and first screw portion surface in the invention of Bramlet with the retaining member, i.e. screw, and surface, i.e. internal thread, of Michelson, because the substitution would have yielded predictable results, i.e. prevent back out of the longitudinal shaft and thus substantially prevent rotation of the shaft.

The method claim would naturally follow using the modified invention of Bramlet, in view of Michelson.

b. Concerning claim 18, 23, and 24, Bramlet further discloses element 250,
 which can be considered a lock nut; the shaft would be at least flexible to a small degree; and first and second members are bone (see Fig. 2);

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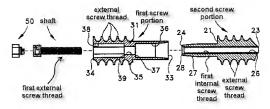


FIG. 7

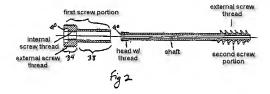
- 6. Claims 5 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2005/0143735 to Kyle (hereinafter "Kyle) in view of US 7,063,701 to Michelson (hereinafter "Michelson"). It is noted that inventions of dependent claims 5 and 20-22 have a different date of invention then independent claim 16. The date of invention of claims 5 and 20-22 is 23 April 2004.
  - c. Concerning claim 20, Kyle discloses a shaft having a head and a longitudinal axis; an external screw thread on said head; a first screw portion having an internal screw thread for engaging said first external screw thread; and a second screw portion; wherein the first and second screw portions each have an external screw thread (see modified Fig. 2 below).

Kyle does not specifically disclose a retaining screw.

Michelson, however, suggests having a retaining screw 130 that mates with an internal thread 118 in order to prevent backing out of a longitudinal shaft 100 and thus substantially preventing rotation of said shaft. It would have been

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obvious to someone of ordinary skill in the art at the time of the invention to add a retaining screw and additional internal thread to the first screw portion in the invention of Kyle in order to prevent backing out of the longitudinal shaft and thus substantially preventing rotation of said shaft as suggested by Michelson.



d. Concerning claim 5, 21, and 22, Kyle further discloses the threads can have a flat end (see ¶ 21; embodied by a closed end); and the screw portion is integral with the shaft.

## Response to Arguments

- Applicant's arguments filed 12 November 2008 have been fully considered but they are not persuasive.
  - e. Applicant's arguments with respect to the "retaining screw" have been considered but are moot in view of the new ground(s) of rejection.
  - f. Concerning the language "collar screw", the first screw portion of Bramlet can be considered a collar screw. It resembles a collar and is threaded.
    Additionally, it has similar shape to applicant's first screw portion which applicant is calling a "collar screw".

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g. Concerning the language "flexible", the shaft of Bramlet is at least capable of being bent to some degree (flexible. (2007). In *The Penguin English Dictionary*. London: Penguin. Retrieved February 27, 2009, from http://www.credoreference.com/entry/8470435/.) It is noted that applicant does not claim a degree of flexibility.

### Conclusion

 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAY R. SIGLER whose telephone number is (571)270-

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3647. The examiner can normally be reached on Monday through Thursday from 8 AM to 4 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. S./ Examiner, Art Unit 3775 /Eduardo C. Robert/ Supervisory Patent Examiner, Art Unit 3733